

2004

Part A: M336G — CIVIL AIRCRAFT AND AIRCRAFT ENGINES
(SHIPMENTS)
Definitions and Special Instructions

1. Scope of survey

Part A of this survey is mailed monthly and covers the manufacture of complete civil aircraft and aircraft engines in the United States. Parts sold separately are excluded from this part. See Part B for aerospace products.

2. Figures to be reported

Companies with more than one establishment manufacturing the products covered by this part of the survey are requested to complete a separate report form for each location. If you have not received a separate form for each establishment, please call the contact shown on the report form or write to the U.S. Census Bureau for additional forms.

Quantity and value of shipments

The figures on quantity and value of shipments should include the physical shipments of all products sold, transferred to other establishments within your company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer, or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to your own branches should be assigned the same value as comparable sales to unaffiliated customers, i.e., the value includes an appropriate allocation of company overhead and profit. Products bought and resold without further manufacture should not be included in shipments. Value figures should represent the value of the complete aircraft or aircraft engine as shipped, including all accessories, attachments, and parts ordered and shipped with the item. (Exclude parts sold separately.) When material or parts of foreign origin are imported into the United States and incorporated with materials or parts produced in the United States, the complete product is considered a domestic product.

Leased aircraft — For aircraft leased or rented by your company, report the number and estimated values. The estimate should approximate the value of the aircraft sold outright. If no such prices exist, the value may be based on the valuation placed on these items for tax, insurance, or similar purposes.

3. Definitions

Aircraft — The term "aircraft" includes lighter-than-air aircraft as well as heavier-than-air aircraft however propelled, but does not include spacecraft. It includes all powered and nonpowered aircraft, such as balloons (except toy), gliders, dirigibles, helicopters, ultra lights, hang gliders, etc.

Military — The term "military" refers to new aircraft and aircraft engines built for military applications, whether for tactical, strategic, or support functions. All aircraft and aircraft engines built for nonmilitary applications are considered as nonmilitary, or civil, and are to be reported on this survey.

Civil — The term "civil" refers to new aircraft and aircraft engines not built for military applications. (See definition for military above.) Report on this part all civil (including general aviation,

commercial-type and helicopters) aircraft regardless of end use. Report aircraft sold in kits in item code 1510.

Unladen — The "empty weight" of an aircraft includes the weight of the aircraft's airframe, powerplant, trapped fuel and oil, coolant (if any), fluid in the hydraulic system, ballast normally carried, and fixed equipment and furnishings.

Fixed-wing aircraft — Aircraft having wings fixed to the airplane fuselage and outspread in flight, i.e., nonrotating wings.

Helicopter — A rotorcraft that depends principally on its engine driven rotors for its horizontal motion.

A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

Turbofan — A turbojet engine whose thrust has been increased by the addition of a low pressure compressor (fan). The turbofan engine can have an oversized low pressure compressor at the front with part of the flow bypassing the rest of the engine (front fan or forwardfan) or it can have a separate fan driven by a turbine stage (aftfan).

Turbojet — Jet engines incorporating a turbine-driven air compressor to take in and compress the air for the combustion (or the heated air) being used both to rotate the turbine and to create a thrust-producing jet.

Turboshaft — A gas turbine geared for use with a propeller or rotor.

Abbreviations and conversion factors

lbs. = pounds	1 lb. = 453.6 grams
kg = kilograms	1 kg. = 2.2046 lbs
kN = kilonewtons	1 kN = 224.8 lbs
kW = kilowatts	1 kW =.7457 hp
hp = horsepower	1 hp = 745.7 watts

4. Comparability

If you also report in the Annual Survey of Manufactures (Form MA-10000), the sum of values for item codes shown in column (a) should correspond to the dollar values reported under product class codes indicated in column (b) below:

Current Industrial Reports (Form M336G)	Annual Survey of Manufactures
Item codes (a)	Product class codes (b)
1204 through 1207 1401 and 1405, 1510	3364113
4201 through 4214	3364123

Part A: CIVIL AIRCRAFT AND AIRCRAFT ENGINES (SHIPMENTS)

FORM M336G		Reference List
Section I — COMPLETE CIVIL AIRCRAFT (Exclude parts sold separately)		
Product code	Item code	Item description
		Civil aircraft (fixed wing, powered):
3364113104	1204	Unladen weight not exceeding 2,000 kg (4,409 lbs)
3364113107	1205	Unladen weight exceeding 2,000 kg (4,409 lbs.) but not exceeding 15,000 kg (33,069 lbs)
3364113111	1207	Unladen weight exceeding 15,000 kg (33,069 lbs)
XXX	1399	Civil aircraft (fixed wing, powered), total
		Helicopters (rotary wing, powered):
3364113114	1401	Unladen weight not exceeding 2,000 kg (4,409 lbs)
3364113117	1405	Unladen weight exceeding 2,000 kg (4,409 lbs)
XXX	1499	Helicopters (rotary wing), total
3364113121	1510	Other civil aircraft (nonpowered) and kits
XXX	1999	Civil aircraft total
Section II — COMPLETE CIVIL AIRCRAFT ENGINES (Exclude parts sold separately)		
3364123101	4201	Spark-ignition reciprocating or rotary internal combustion (piston engines)
3364123104	4203	Turbojet and turbofan - of a thrust not exceeding 25 kN (5,620 lbs)
3364123107	4205	Of a thrust exceeding 25 kN (5,620 lbs)
3364123111	4207	Turboshaft (turbo propeller) - of a power not exceeding 1,100 kW (820 hp)
3364123114	4209	Of a power exceeding 1,100 kW (820 hp)
3364123117	4214	Other, including auxiliary power units, excluding missile and space engines
XXX	4299	Civil aircraft engines
		Total (Sum of item codes 4201–4214)
NOTES		

Part B: MA336G — AEROSPACE INDUSTRY (ORDERS, SALES, AND BACKLOG)

Definitions and Special Instructions

1. Scope of survey

Part B of this survey is mailed annually and covers establishments primarily engaged in the development and/or manufacture of aerospace products, including aircraft, aircraft engines, aircraft parts and accessories, missiles and space vehicle systems, missile and space vehicle engines or propulsion units, and parts and subassemblies for missiles and space vehicles. In the North American Industry Classification System (NAICS) coding system, these product categories correspond to NAICS 33641. An establishment is "primarily engaged" in aerospace if the value of aerospace products and services produced by that establishment exceeds the value of the establishment's production of other goods and services. Company plants or divisions in which the primary activity is other than the development and/or manufacture of aerospace products and services should not be included in this survey.

2. Figures to be reported

Companies with more than one establishment manufacturing the products covered by this part of the survey are requested to complete a separate report form for each location. If you have not received a separate form for each of your establishments, please call the contact shown on your report form or write to the U.S. Census Bureau for additional forms.

This report should cover receipts for research, development, and experimental work (including all military contracts) as well as models in production. However, do not include research or development financed by company funds.

a. Value of shipments

The figures on value of shipments ("Net sales receipts or billings") should include all products sold, transferred to other establishments within your company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges and returns. Shipments to your own branches should be assigned the same value as comparable sales to unaffiliated customers, i.e., the value includes an appropriate allocation of company overhead and profit. Products bought and resold without further manufacture should not be included in shipments.

If a company reports, enter the consolidated sales, receipts, or billings of the company in column 3, net after discounts and allowances. If a division or plant reports, enter the value of the division or plant sales only. Include all sales from aerospace production, and receipts for research and development performed for other companies, individuals, U.S. Government agencies, and foreign governments. Sales by foreign subsidiaries should be excluded. Transfers within the

reporting unit should also be excluded. Transfers to other reporting units should be included.

Producers of these items should report the value of shipments during the year on complete aircraft, missiles, space vehicles, and missile or space vehicle engines in column 3. Work performed under a fixed price contract should be reported as a shipment if the product is delivered during the year. Work done on a cost-plus contract should reflect cost incurred plus a portion of the profits for the contract (value of work done) during the year. Value of work done may be based on (a) multiplying the estimated percentage of work completed during the year by the contract price of the aircraft or missile, or (b) net billings for work done during the year.

b. Net new orders

Net new orders received (new orders received less cancellations) — Include (a) the sales value of orders received during the current reporting period for products and services to be delivered at some future date; (b) the sales value of orders for immediate delivery which have resulted in sales or shipments during the current reporting period; (c) the net sales value of contract change documents which increase or decrease the sales value of the orders to which they are related when the parties concerned are in substantial agreement as to the amount involved.

Include as orders only those orders that are supported by binding legal documents, such as signed contracts or letter contracts. In the case of letter contracts, the full amount of sales value should be included if the parties concerned are in substantial agreement on this amount; otherwise, only the funds specifically authorized to be expended should be included. Deduct the sales value of partial or complete cancellations of existing orders.

Separate dollar values are required for new orders which you received as a prime contractor and those you received as a subcontractor. All subcontracts, including those where you know that the prime contract was let by a government, are to be reported as subcontracts received from "Other customers."

NOTE — All sales during the current year resulting from orders not on the books at the beginning of the year must be reported as both new orders and sales during the year.

c. Ending backlog (unfilled orders)

Enter the total backlog at the end of the year. Compute the figure by adding net new orders and subtracting net sales from the backlog at the end of the preceding year. If adjustments are necessary from time to time in order to keep the report in balance, indicate the nature and amount of such adjustments under "Remarks." At the end of the year,

Part B: Definitions and Special Instructions — Continued

the backlog of outstanding orders for contracts on which you are the prime contractor should also be reported. Include only orders that have not yet passed through the sales account.

3. Definitions

MILITARY AND NONMILITARY

The term "military" refers to complete aircraft, aircraft engines, missile systems, space vehicle systems, engines and/or propulsion units for missile systems or space vehicles, and other aerospace related activities for military applications, whether for tactical, strategic, or support functions.

The term "nonmilitary" refers to the same products **not** built to the above military specifications.

TYPE OF CUSTOMER

U.S. Government (military)

Include contracts with the Department of Defense (DOD) and other U.S. Government agencies for products built to military specifications.

Exclude contracts for which the ultimate customer is a foreign customer, such as contracts made under the Foreign Military Assistance Program.

Other governments (military)

Include — Contracts for products built to military specifications for governments other than the United States. Include DOD or other U.S. Government agencies for which the ultimate customer is a foreign government. Contracts for foreign governments not to military specifications should be reported as "nonmilitary" to other customers.

U.S. Government (nonmilitary) — Include contracts with any U.S. Government agency for products not built to military specifications.

Other customers (nonmilitary) — Include contracts for products not built to military specifications for all customers other than U.S. Government agencies. Include both domestic and foreign commercial customers as well as foreign governments.

TYPE OF PRODUCT OR SERVICE

Complete aircraft and parts — All companies (or divisions or plants) producing or developing complete aircraft (airplanes, balloons, airships, gliders, helicopters, autogiros) should report in item codes 1001–1113.

Aircraft engines and parts — All companies (or divisions or plants) producing or developing aircraft engines should report in item codes 2001–2103.

Missile systems and parts — All companies (or divisions or plants) producing, developing, or having system responsibility for complete missiles (excluding propulsion, if separable) should report in item codes 3001–3103.

Space vehicle systems and parts — All companies (or divisions or plants) producing, developing, or having system responsibility for complete space vehicles (excluding propulsion, if separable) should report in item codes 4001–4103.

NOTE: For manufacturers and/or assemblers of missiles and/or space vehicles—propulsion (if separable) is to be excluded as part of item codes 3001–3103 and 4001–4103 and reported separately as a part of item codes 5001–5103, "Engines and/or propulsion units for missile systems, including parts," or item codes 6001–6103, "Engines and/or propulsion units for space vehicles."

Engines and/or propulsion units for missiles and space vehicles, including parts — All companies (or divisions or plants) producing or developing engines and/or propulsion units for missiles and space vehicles should report in item codes 5001–6103. (Manufacturers and/or assemblers of missile systems and/or space vehicles systems should include their propulsion in item codes 5001–6103, if separable.)

Other aircraft and space vehicle -- Report in item codes 7201–7303. Other missile activities report in item codes 7401–7503, all conversions, modifications, site activation, and all other aerospace products, including drones or services of your company, division, or plant excluded in item codes 1001–6103. Exclude research and development.

Research and development (item codes 8001–8103) — Research and development includes basic and applied research in the sciences and in engineering and design and development of prototype products and processes. It does not include quality control, routine product testing, market research, sales promotion, sales service, research in the social sciences or psychology or other nontechnological activities or technical services.

Basic research — Research projects which represent original investigation for the advancement of scientific knowledge, and which do not have specific commercial objectives, although they may be in fields of present or potential interest to the sponsor.

Applied research — Research projects which represent investigation directed to discovery of new scientific knowledge, and which have specific commercial objectives with respect to either products or processes.

Note that this definition of applied research differs from the definition of basic research chiefly in terms of the objectives of the sponsor.

Include receipts for development or preoperational and operational aerospace programs under item codes 1001–6103, in the "Net sales, receipts, or billings" column. Such receipts should correspond to the "Development" costs, reported on the Bureau's "Survey of Industrial Research and Development" (code 3599 in item 5, of form RD-1), and to the values reported in the "Annual Survey of Manufacturers" (MA-1000), for research and development

principally in such product classes as 3364117, 3364125, 3364133, 3364143, 3364153, and 3364193.

All other products and services — Report in item codes 9001–9103 the value of orders, sales, and backlog of nonaerospace products and services developed and/or manufactured in the establishments covered by this survey.

Part B: AEROSPACE INDUSTRY (ORDERS, SALES, AND BACKLOG)

FORM MA336G						
Reference List						
Product code	Item code	Item description	Net new orders		Net sales receipts or billings	Ending backlog (prime plus subcontract)
			Prime contract (c)	Subcontract (d)		
	(a)	(b)			(e)	(f)
3364101101 3364101105	1001 1003	Complete aircraft and parts: Military: U.S. Government Other governments				
3364101171 3364101175	1111 1113	Nonmilitary: U.S. Government Other customers				
3364101301 3364101305	2001 2003	Aircraft engines and parts: Military: U.S. Government Other governments				
3364101371 3364101375	2101 2103	Nonmilitary: U.S. Government Other customers				
3364101501 3364101505	3001 3003	Missile systems and parts, excluding propulsion units: Military: U.S. Government Other governments				
3364101571 3364101575	3101 3103	Nonmilitary: U.S. Government Other customers				
3364101701 3364101705	4001 4003	Space vehicle systems and parts, excluding propulsion units: Military: U.S. Government Other governments				
3364101771 3364101775	4101 4103	Nonmilitary: U.S. Government Other customers				
3364101901 3364101905	5001 5003	Engines and/or propulsion units for missile systems, including parts: Military: U.S. Government Other governments				
3364101971 3364101975	5101 5103	Nonmilitary: U.S. Government Other customers				
3364101B01 3364101B05	6001 6003	Engines and/or propulsion units for space vehicles, including parts: Military: U.S. Government Other governments				
3364101B71 3364101B75	6101 6103	Nonmilitary: U.S. Government Other customers				

Part B: AEROSPACE INDUSTRY (ORDERS, SALES, AND BACKLOG)

FORM MA336G

Reference list — Continued

Product code	Item code	Item description	Net new orders		Net sales receipts or billings	Ending backlog (prime plus subcontract)
			Prime contract	Subcontract		
	(a)	(b)	(c)	(d)	(e)	(f)
3364101D01 3364101D05	7201 7203	Other aircraft and space vehicles: Military U.S. Government Other governments				
3364101D71 3364101D75	7301 7303	Nonmilitary U.S. Government Other customers				
3364101F01 3364101F05	7401 7403	Other missile activities: Military U.S. Government Other governments				
3364101F71 3364101F75	7501 7503	Nonmilitary U.S. Government Other customers				
3364101H01 3364101H01	8001 8003	Research and development (under contract): Military U.S. Government Other governments				
3364101H71 3364101H75	8101 8103	Nonmilitary U.S. Government Other customers				
3364101K01 3364101K05	9001 9003	All other products and services: Military U.S. Government Other governments				
3364101K71 3364101K75	9101 9103	Nonmilitary U.S. Government Other customers				
XXX	9501	TOTAL — U.S. Government (military)				
XXX	9503	TOTAL — Other governments (military)				
XXX	9601	TOTAL — U.S. Government (nonmilitary)				
XXX	9603	TOTAL — Other customers (nonmilitary)				

1/14/02